ABSTRACT

A method and device of treating an irregularly shaped article to prepare the article for painting is provided. The device includes a burner which can produce an adjustable flame tongue which can fit into crevices, openings and other irregular topographical features of an item to be painted or otherwise coated. The burner device further provides means to apply a grafting chemical on a freshly oxidized surface. Further, the invention provides means to colorize treated objects so that they may be recognized as having been treated. In another embodiment, the grafting chemicals may be enhanced with electrolytic solutions such that electrostatic methods of painting may be subsequently employed on the item. In an alternate embodiment, the burner is adapted to spray a powder inside of a generally enclosed flame, and is used in conjunction with chop guns to manufacture glass or carbon fiber preforms. In a preferred embodiment all of the main systems of the present invention are provided with redundancies that allow the continuous operation of the device. Further, the device provides means to run and modify the process either locally or by remote communication means.